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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/614,286 07/12/00 TANABE

H NECK 17.552

EXAMINER

MMC2/1031

HELFGOTT & KARAS PC  
60TH FLOOR  
EMPIRE STATE BUILDING  
NEW YORK NY 10118

SUTTON T  
 ART UNIT  PAPER NUMBER

2813

DATE MAILED:

10/31/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Application No.	Applicant(s)	
09/614,286	TANABE, HIROSHI	
Examiner	Art Unit	
Timothy J Sutton	2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12 July 2000 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4,7.
- 4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION*****Drawings***

1. Figure 1 is objected to as failing to comply with 37 CFR 1.84(p)(5) because it includes the following reference sign(s) not mentioned in the description: 1106 (figure1) and 118 (figure 1). Correction is required.

***Specification***

2. The disclosure is objected to because of the following informalities that are not described about in the specification: numbers 1106 and 118 in figure 1. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Makita et al. (U.S. 5,821,562).

Re claim 1, Makita et al. discloses a method for forming a first-property semiconductor film at a desired position on a substrate, comprising the steps of: a) preparing the substrate having a second-property semiconductor film formed thereon (see column 30, lines 58-61); b) preparing an optical mask having a predetermined pattern (see column 32, lines 30-35); c) relatively positioning a projection area of the

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optical mask at the desired position on the substrate (see column 32, lines 30-35); d) irradiating the desired position of the second-property semiconductor film with laser light through the optical mask to change an irradiated portion of the second-property semiconductor film to the first-property semiconductor film (see column 32, lines 43-52); and e) forming an insulation film on at least the first-property semiconductor film (see column 32, lines 53-60).

Re claim 2, as applied to claim 1 above, Makita et al. discloses all of the claimed limitation including the limitation wherein the substrate has an alignment mark previously formed thereon, wherein the alignment mark is used to position the projected area of the optical mask in step (c) (see column 27, lines 39-44).

Re claim 3, as applied to claim 1 above, Makita et al. discloses all of the claimed limitation including the limitation wherein the optical mask has an alignment mark pattern, wherein, in the step (d), an alignment mark corresponding to the alignment mark pattern is formed, wherein the alignment mark is visible due to a difference in optical characteristic between the first-property semiconductor film and the second-property semiconductor film (see column 27-19-29).

Re claim 4, as applied to claim 3 above, Makita et al. discloses all of the claimed limitation including the limitation wherein a positioning process after the step (d) is performed with reference to the alignment mark (see column 27, lines 39-44).

Re claim 5, as applied to claim 1 above, Makita et al. discloses all of the claimed limitation including the limitation wherein the first-property semiconductor film is a

single-crystal semiconductor film and the second-property semiconductor film is an amorphous semiconductor film (see column 9, lines 35-55).

Re claim 6, as applied to claim 3 above, Makita et al. discloses all of the claimed limitation including the limitation wherein the first-property semiconductor film is a crystalline semiconductor film and the second-property semiconductor film is an amorphous semiconductor film (see column 30, lines 55-62 and column 32, lines 40-55).

Re claim 7, Makita et al. discloses a method for forming a crystalline semiconductor film at a desired position on a substrate, comprising the steps of: a) preparing the substrate having an amorphous semiconductor film formed thereon (see column 30, lines 58-61); b) preparing an optical mask having a predetermined pattern (see column 32, lines 30-35); c) relatively positioning a projection area of the optical mask at the desired position on the substrate (see column 32, lines 30-35); d) irradiating the desired position of the amorphous semiconductor film with laser light through the optical mask to change an irradiated portion of the amorphous semiconductor film to the crystalline semiconductor film (see column 32, lines 43-52); and e) forming an insulation film on at least the first-property semiconductor film (see column 32, lines 53-60).

Re claim 8, as applied to claim 7 above, Makita et al. discloses all of the claimed limitation including the limitation further comprising the step of f) forming an island comprised of the insulation film and the crystalline semiconductor film by a patterning process, wherein the crystalline semiconductor film of the island is a single-crystal

semiconductor film used for source, drain, and channel regions of a field effect transistor (see column 33, lines 38-43).

Re claim 9, as applied to claim 7 above, Makita et al. discloses all of the claimed limitation including the limitation wherein the substrate has an alignment mark previously formed thereon, wherein the alignment mark is used to position the projected area of the optical mask in the step (c) (see column 27, lines 39-44).

Re claim 10, as applied to claim 7 above, Makita et al. discloses all of the claimed limitation including the limitation wherein the optical mask has an alignment mark pattern, wherein, in the step (d), an alignment mark corresponding to the alignment mark pattern is formed, wherein the alignment mark is visible due to a difference in optical characteristic between the crystalline semiconductor film and the amorphous semiconductor film (see column 27, lines 19-29).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J Sutton whose telephone number is 703-305-0070. The examiner can normally be reached on M-F 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Bowers can be reached on 703-308-2417. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

tjs  
October 29, 2001

*Charles D. Bowers Jr.*

Charles Bowers  
Supervisory Patent Examiner  
Technology Center 2800